

BYUS, Ye.I.; RUBINSHTEYN, M.M.; DZHANELIDZE, A.I., deystvitel'nyy chlen.

New data on a series of earthquakes in 1941, in western Georgia. Soob.AN
Gruz.SSR 13 no.9:519-524 '52. (MLRA 6:5)

1. Akademiya Nauk Gruzinskoy SSR (for Dzhanelidze). 2. Akademiya Nauk
Gruzinskoy SSR. Institut geofiziki, Tbilisi (for Byus, Rubinshteyn).
3. Akademiya Nauk Gruzinskoy SSR. Institut geologii i mineralogii, Tbilisi
(for Byus, Rubinshteyn). (Georgia--Earthquakes)

RUBINSHTEYN, M.M.

BYUS, Ye.I.; RUBINSHTEIN, M.M.

New data on the Tabatskuri earthquake of May 7-8, 1940. Soob. AN Gruz.
SSR 14 no.2:85-89 '53. (MLRA 7:5)

1. Akademiya nauk Gruzinskoy SSR Institut geofiziki, Institut geologii
i mineralogii. (Georgia--Earthquakes) (Earthquakes--Georgia)

TSAGARELI, A.L.; RUBINSHTYIN, M.M., redaktor; TODUA, A.R., tekhnicheskii
redaktor.

Upper Cretaceous of Georgia. Monografiia Instituta geologii i mineralologii
Akademii nauk Gruzinskoi SSR no.5:5-462 '54. (MIRA 9:1)
(Georgia--Geology, Stratigraphic)

RUBINSHTEYN, M.M.

Absolute age of some magmatic formations in Georgia. Soob. AN
Gruz. SSR 16 no. 6: 453-458 '55. (MLRA 9:2)

1. Akademiya nauk Gruzinskoy SSR, Institut geologii i mineralogii, Tbilisi. Predstavleno deystvitel'nym chlenom Akademii
A. I. Dzhanelidze

(Georgia--Magma) (Radioactivity)

BYUS, Ye.I.; RUBINSHEYN, M.M.

Nature of seismic activity on the southern slope of the Greater
Caucasus. Soob.AN Gruz.SSR 17 no.9:801-806 '56. (MLRA 10:2)

1. Akademiya nauk Gruzinskoy SSR, Institut geofiziki, Geologicheskii
institut, Tbilisi. Predstavleno akademikom A.I.Dzhanelidze.
(Caucasus--Earthquakes)

TAVADZE, F.N., otv. red.; AGLADZE, R.I., red.; ARCHVADZE, Sh.R., red.;
 VACHNADZE, N.D., red.; OVELESIANI, G.G., red.; GUDZHEDZHIANI, B.I., red.;
 DZHANELIDZE, A.I., red.; DZOTSENIDZE, G.S., red.; DURMISHIDZE,
 S.V., red.; KETSKHOVELI, N.N., red.; MIKELADZE, I.S., red.;
 RUBINSHTEYN, M.M., red.; TVALCHRELIDZE, A.A., red., [deceased];
 TSITSISHVILI, G.V., red.; SHENGELIYA, P.G., red.; FEODOT'YEV,
 K.M., red. izd-va; GUSEVA, A.P., tekhn. red.

[Natural resources of the Georgian S.S.R.] Prirodnye resursy
 Gruzinskoi SSR. Moskva. Vol. 1. [Metalliferous minerals] Metallicheskie
 poleznye iskopaemye. 1958. 230 p. (MIRA 11:11)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Sovet po izucheniyu
 proizvoditel'nykh sil. 2. Chlen-korrespondent AN Gruz. SSR (for Tavadze).
 (Georgia--Ore deposits)

RUBINSHTEYN, M. M. 11-58-6-8/13

AUTHORS: Rubinshteyn, M.M.; Grigor'yev, I.G.; Gel'man, O.Ya.; Khutsaidze, A.L.; Chikvaidze, B.G.

TITLE: On the Technique of Obtaining Monomineral Fractions for Determining the Absolute Age of Rocks by the Argon Method (K metodike polucheniya monomineral'nykh fraktsiy dlya opredeleniya absolutnogo vozrasta gornykh porod argonovym metodom)

PERIODICAL: Izvestiya Akademii Nauk SSSR, Seriya Geologicheskaya, 1958, Nr 6, pp 95-100 (USSR)

ABSTRACT: The Argon method of determining the absolute age of rocks is the most convenient for wide scale use in geological research. Not all potassium containing minerals can be used for this purpose. The best mineral is mica - and especially muscovite, biotite and glauconite mica. For the purposes of obtaining monomineral fractions of these minerals in large quantities (necessary for mass age determination), the author constructed 2 separators of which descriptions are given. There are 2 photos, 2 figures, and 6 references, 4 of which are Soviet and 2 American.

Card 1/2

On the Technique of Obtaining Monomineral Fractions for Determining the
Absolute Age of Rocks by the Argon Method

11-58-6-8/13

ASSOCIATION: Geologicheskii institut AN GruzSSR, Tbilisi (Geologic In-
stitute of the AS of the Georgian SSR, Tbilisi)

SUBMITTED: July 15, 1957

AVAILABLE: Library of Congress

Card 2/2 1. Geology 2. Rock-Determination

TSAGARELI, A.I., akademik, glav. red.; BULEYSHVILI, D.A. red.;
DZEHANELIDZE, A.I., akademik, red.; DZOTSSENIDZE, G.S., akademik
red.; ZARIDZE, G.M., red.; ZESASHVILI, V.I., red.;
RUBINSHTEYN, N.M., red.; GANKRELIDZE, P.D., akademik, red.

[Problems of the geology of Georgia; for the 22d session
of the International Geological Congress] Voprosy geologii
Gruzii; k XXII sessii Mezhdunarodnogo geologicheskogo kon-
gressa. Tbilisi, Izd-vo "Metsniereba," 1964. 477 p.
(MIRA 18:3)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. 2. Akademiya nauk
Gruzinskoy SSR, Tiflis (for Gankrelidze, Dzhanelidze,
Dzotsenidze, Tsagareli

RUBINSHTEN, M.M.; GELMAN, O. YA.

Constants of K^{40} radioactive decay. Metod. opr. abs. vozr. geol.
str. no. 632-39 161 (MIRA 18:2)

SIDORENKO, A.V., glav. red.; GAMKRELIDZE, P.D., red.; DZOTSENIDZE,
G.S., red.; ZARIDZE, G.M., red.; KACHAROVA, I.V., red.;
RUBINSHTEYN, M.M., red.; TSAGARELI, A.L., red.; CHELIDZE,
G.F., red.

[Geology of the U.S.S.R.] Geologiya SSSR. Glav. red. A.V.
Sidorenko. Moskva, Nedra. Vol.10. Pt.1. 1964. 654 p.
(MIRA 17:12)

RUBINSHTEYN, M.M.

Argon dating of biotites and their use in absolute geochronology.
Trudy Geol.inst. AN Gruz.SSR. Geol.ser. 13:233-253 '63.
(MIRA 16:9)

KEBADZE, N.I.[deceased]; Primal uchastiye BULEISHVILI, D.A., kand.
geol.-miner. nauk; TAVADZE, F.N., otv. red.; RUBINSHTEYN,
M.M., kand. geol.-miner. nauk, red.; PEVZNER, G.Ye., red.;
KONDRAT'YEVA, V.I., red.; BANKVITSER, A.L., red.; ASTAF'YEVA,
G.A., tekhn. red.

[Natural resources of the Georgian S.S.R.] Prirodnye resursy
Gruzinskoy SSR. Moskva, Vol.5.[Fuel resources] Toplivnye
resursy. 1963. 271 p. (MIRA 16:8)

1. Akademiya nauk Gruzinskoy SSR. Tiflis. Sovet po izuche-
niyu proizvoditel'nykh sil.
(Georgia—Coal geology) (Georgia—Peat)
(Georgia—Petroleum geology)

RUBINSHTEYN, M.M.

Absolute geological time scale. Trudy Geol.inst.AN Gruz.SSR.
Min. i petr. ser. 6:173-189 '61. (MIRA 15:9)
(Geological time)

RUBINSHTEYN, M.M.; GRIGOR'YEV, I.G.; UZNADZE, E.D.; GEL'MAN, O.Ya.

Photometric determination of potassium and sodium in ammonia-oxygen flame. Biul.Kom.po opr.abs.vozr.geol.form. no.4:109-113
'61. (MIRA 15:1)

(Geological time)
(Potassium) (Sodium)

RUBINSHTEYN, M.M.

Time formation of the crystalline substratum in the Caucasus.
Biul.Kom.po opr.abs.vozr.geol.form. no.4:59-63 '61. (MIRA 15:1)
(Caucasus--Rocks, Crystalline and metamorphic)
(Geological time)

RUBINSHTEYN, M.M.; GEL'MAN, O.Ya.

Necessity of unifying the values of the radioactive decay constants of K^{40} used in absolute age determination. Izv. AN SSSR. Ser.geol. 27 no.6:3-11 Je '62. (MIRA 15:5)

1. Geologicheskii institut AN Gruzinskoy SSR, Tbilisi.
(Radioisotopes---Decay) (Geological time)
(Potassium---Isotopes)

S/011/62/000/006/001/001
A051/A126

AUTHORS: Rubinshteyn M. M., Gel'man, O. Ya.

TITLE: On the necessity of unification of the values of K_{40} radioactive decay constants used in calculating the absolute age

PERIODICAL: Akademiya nauk SSSR Izvestiya. Ser. geologich., no. 6, 1962, 3-11

TEXT: The authors discuss the decay constants of K_{40} and their determination by the radiogenic argon content. They are reviewing methods presented in pertinent literature published in the period from 1947 to 1961. In their conclusion they stress the point that the use of a diversity of constants for the calculation of age values should be discontinued and suggest a decision on the unification be made by an authoritative body as the International Geological Congress. ✓

ASSOCIATION: Geologicheskii institut AN GruzSSR, Tbilisi (Geology Institute of the AS GeorgianSSR, Tbilisi)

Card 1/1

S/519/60/000/008/013/031
D051/D113

AUTHOR: Rubinshtein, M.M.

TITLE: Geological criteria of seismic zoning in Georgia

SOURCE: Akademiya nauk SSSR. Sovet po seysmologii. Byulleten', no. 8, Moscow, 1960. Voprosy seysmicheskogo rayonirovaniya, 116-120

TEXT: The author sets forth some geological criteria to be observed for the seismic zoning of the Gruzinskaya SSR. They are based on studies carried out for Georgia and adjacent regions by the author and his associates in collaboration with Ye. I. Byus and A.D. Tskhakava. The results of these studies have already been published and are now being prepared for print. The author briefly reviews the method of earthquake forecasting, frequently used for seismic zoning. Since it is impossible to provide exact earthquake recurrence data, the method is limited to determining the maximum intensity of expected earthquakes in any area on the basis of statistical materials. The author considers that the geographical limitations of this method can be overcome by revealing seismically active tectonic structures and establish-

Card 1/2

Geological criteria of ...

S/519/60/000/008/013/031
D051/D113

ing their degree of seismic hazard using seismostatistical data. Most of the Georgian earthquakes are connected with deep tectonic layers. They can be determined by analyzing frequently occurring seismic phenomena and also by using the data of regional observations conducted using instruments. As the epicenters usually form accumulations extending towards deep seismically active structures, a number of deeply seated faults could be established. Quoting the Megrel'skiy fault as an example, the author describes how it was possible, on the basis of earthquake data, seismic survey, and deep drilling, to determine the extension, composition and age of this formation. He also quotes other examples in order to substantiate the proposed method, stating that it is necessary to consider the link between deep and surficial structures, because most earthquakes are due to faults near the Earth's surface. He recommends that seismic zoning maps of the Gruzinskaya SSR be corrected according to sub-surface tectonic data, and should be compiled on a 1:500000 scale. There are 9 Soviet references. ✓

ASSOCIATION: Geologicheskii institut AN Gruzinskoy SSR (Geological Institute of the AN Gruzinskaya SSR)

Card 2/2

CHIKHELIDZE, S.S.; TAVADZE, F.N., akademik, otv. red; AGLADZE, R.I., red.;
 ARCHVADZE, Sh.R., red.; VACHNADZE, N.D., red.; GVELISIANI, G.G.,
 red.; GUDZHEDZHIANI, B.I., red.; DZHANELIDZE, A.I., red.;
 DZOTSENIDZE, G.S., red.; DURMISHIDZE, S.V., red.; KETSKHOVELI, N.N.,
 red.; MIKELADZE, I.S., red.; RUBINSHTEYN, M.M., red.; TVALCHRELIDZE,
 A.A., red.[deceased]; TSITSISHVILI, G.V., red.; SHENGELIYA, P.G.,
 red.; FEDOT'YEV, K.M., red.izd-va; DOROKHINA, I.N., tekhn. red.

[Natural resources of the Georgian S.S.R.] Prirodnye resursy Gru-
 zinskoi SSR. Moskva, Izd-vo Akad.nauk SSSR. Vol.3. [Mineral water]
 Mineral'nye vody. 1961. 438 p. (MIRA 14:12)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Sovet po izucheniyu pro-
 izvoditel'nykh sil. 2. Akademiya nauk Gruzinskoy SSR (for Tavadze).
 (Georgia--Mineral water)

RUBINSHTEYN, M.M.; BUADZE, V.I.

Age of ore-bearing strata of the Khudes (Kizylkol') copper pyrite deposit. Dokl.AN SSSR 138 no.6:1428-1430 Je '61. (MIRA 14:6)

1. Geologicheskii institut AN GruzSSR, Kavkazskiy institut mineral'nogo syr'ya. Predstavleno akademikom D.I.Shcherbakovym.
(El'brus region--Geology, Stratigraphic)

27751
S/058/61/000/007/042/086
A001/A101

11.4100
AUTHORS: Rubinshteyn, M.M., Grigor'yev, I.G., Uznadze, E.D., Gel'man, O.Ya.,
Lashkhi, B.A.

TITLE: Spectrophotometrical determination of alkali metals in ammonia-oxygen flame

PERIODICAL: Referativnyy zhurnal. Fizika, no. 7, 1961, 175, abstract 70149 .
("Soobshch. AN GruzSSR", 1960, v. 24, no. 6, 683 - 690)

TEXT: The authors describe a flame-photometrical device designed for determination of Na, K, Li and Rb in solutions. The $\text{NH}_3\text{-O}_2$ flame was used for spectrum excitation. The measurement of spectral line intensities was conducted with a photoelectrical device which consisted of an YM-2 (UM-2) monochromator, a photocell, a d-c amplifier, and a microamperemeter. The nature of an effect which arose at the simultaneous determination of alkali elements was investigated, and methods of taking it into account are proposed. In particular, tables are calculated for correcting the results of joint determinations of Na and K.

M. Britske

[Abstracter's note: Complete translation]

Card 1/1

RUBINSHTEYN, M.M.

Length of the Jurassic period. Dokl. AN SSSR 136 no.6:1432-1435
F '61. (MIRA 14:3)

1. Geologicheskii institut AN Gruzinskoy SSR. Predstavleno
akademikom D. I. Shcherbakovym. (Geological time)

DZOTSENIDZE, G.S.; SKHIRTADZE, N.I.; RUBINSHTEYN, M.M., red.; SARKISYAN, L.N., red.izd-va; DZHAPARIDZE, N.A., tekhred.

[Lithology and paleogeography of the Middle Jurassic coal sediments in Western Georgia] Litologiya i paleogeografiya polosy sredne-iurskikh ugliosnykh otlozhenii Zapadnoi Gruzii. Tbilisi, Izd-vo Akad.nauk Gruzinskoj SSR, 1961. 110 p.

(MIRA 14:6)

(Georgia—Coal geology)

RUBINSHTEYN, M.M.; GRIGOR'YEV, I.G.; UZNADZE, E.D.; GEL'MAN, O.Ya.; LASHKHI,
B.A.

Spectrometric determination of alkali metals in an ammonia-oxygen
flame. Soob.AN Gruz.SSR 24 no.6:683-690 Je '60. (MIRA 13:9)

1. AN GruzSSR, Geologicheskii institut, Tbilisi. Predstavleno
akademikom A.I.Dzhanelidze.
(Alkali metals)

RUBINSHTYN, M.M.; CHIKVAIDZE, B.G.; KHUTSAIDZE, A.L.; GEL'MAN, O.Ya.

Using glauconite for determining the absolute age of
sedimentary rocks by the argon method. Izv. AN SSSR. Ser.
geol. 24 no.12:77-83 D '59. (MIRA 13:8)

1. Geologicheskii institut AN GruzSSR, Tbilisi.
(Rocks, Sedimentary) (Glauconite) (Argon)

ERISTAVI, M.S.; RUBINSHTEYN, M.M., red.; BATIASHVILI, E.V., red.izd-vs;
TODUA, A.R., tekhred.

[Monographs] Monografi. Tbilisi. No.10. [Lower Cretaceous in
the Caucasus and the Crimea] Nizhnii mel Kavkaza i Kryma.
1960. 148 p. (MIRA 13:12)

1. Akademiya nauk Gruzinskoy SSR, Tiflis. Geologicheskii institut.
(Caucasus--Geology) (Crimea--Geology)

RUBINSHTEYN, M.M.; TSEHAKAYA, A.D.

Seismotectonic characteristics of the Dzhavakhtskoye
(Akhalkalaki) Upland. Trudy Inst.geofiz.AN Gruz.SSR 17:161-175
'58. (MIRA 13:4)

1. Geologicheskii institut AN GruzSSR, Tbilisi i Institut
geofiziki AN GruzSSR, Tbilisi.
(Akhalkalaki region--Seismology--Observations)

SOV/169-59-2-1161

Translation from: Referativnyy zhurnal, Geofizika, 1959, Nr 2, p 19 (USSR)

AUTHOR: Rubinshteyn, M.M.

TITLE: An Attempt to Interpret Geologically Seismic Data on the Territory of Georgia

PERIODICAL: Tr. geol. in-ta. AS GruzSSR, 1957, Nr 10 (15), pp 181 - 195

ABSTRACT: From the analysis of the macro- and microseismic data on the territory of Georgia, the existence of the following seismically active depth clefts is ascertained: Megrel'skiy, that in the southern slope of the Main Caucasian range (conjugating in the region of the Kel'skiy plateau with the cleft passing along the southern boundary of the Alazanskiy depression), Abul-Samsarskiy, and Kechutskiy. The connection of the subsurface structures with the surface structures is not always manifested identically. In particular, a zone of echelon-brachy-anticlines corresponds to the Megrel'skiy deep-seated cleft, seismically active deep-seated clefts are oriented transversally to the course of folded and ruptured dislocations in the upper structural levels within the boundaries of the Akhalkalakskiy highland.

Card 1/2

SOV/169-59-2-1161

An Attempt to Interpret Geologically Seismic Data on the Territory of Georgia

In the case of the surface location of the seismic foci (for example the Rachinsko-Lechkhumskiy-syncline), their immediate connection with the young tectonic structures, which can be detected by the usual methods of geological survey, can be recognized sufficiently distinct. Bibl. 15 titles.

G.K. Tvaltvadze

Card 2/2

Rubinshteyn, M. M.

TABLE I BOOK EVALUATION

57/603

Abadziya nauk SSSR. Sovet po seismologii

Kyallsten, No. 8: Voprosy seismicheskoy regionalizatsii (Bulletin of the Council on Seismology, Academy of Sciences USSR, No. 8: The Problems of Division into Seismological Districts) Moscow, 1960. 223 p. 1,000 copies printed.

Prof. M. I. G. V. Rubinshteyn, Doctor of Technical Sciences; Prof. I. A. Kuznetsov, I. A. Kuznetsov, and I. E. Rubinshteyn, Prof. I. E. Rubinshteyn.

PURPOSE: This publication is intended for seismologists.

CONTENTS: The publication contains articles based on reports presented at the meetings of the Council on Seismology held in Moscow, March 1959, and the articles reflect the present state of work conducted in seismological districting and discuss the following problems: Principles of seismological districting and macroregionalization, methods of compiling maps of seismological regions, treatment and descriptive data on earthquakes in different seismic regions of the USSR, and the relationship between activity and geological structure. The articles are accompanied by diagrams, tables, and bibliographic references.

Prednatchy, K. A. Utilizing Data Obtained on Weak Earthquakes in Problems of Seismic Regionalization

Savitskiy, K. V. Seismic Physics and Seismic Regionalization

Kate, A. E. Physical Principles of a Method of Seismic Microregionalization

Popov, V. V. Role of Engineering Geological Conditions in Detailed Seismic Regionalization

Matveyev, A. E. Problems in Methods of Seismic Regionalization Based on the Example of the Territory of the Dnieper Hydroelectric Power Station in the Georgian SSR

Matveyev, I. M. Earthquakes of November 19, 1940 in Moldavia and Adjacent Regions, and Problems of Seismic Regionalization of the Earthquakes Part of the USSR

Kuz, Yu. I., and A. B. Zubakov. Seismic Principles of Seismic Regionalization of the Caucasus

Rikhtsis, P. E. Macroseismic Data on Earthquakes in the Northern Caucasus

Matveyev, V. A., and D. N. Kuznetsov. Seismicity and Recent Earthquakes of the Zone of the Kremnya Polyana Earthquakes

Seismicheskaya, M. E. Geological Criteria in the Seismic Regionalization of Georgia

Kirillova, I. V., and A. A. Korotkiy. A Method of Compiling Maps of Seismic Regionalization on a Scale of 1:1,000,000 Using the Caucasus as an Example

Kirillova, I. V. On Seismic Conditions in Transcaucasia, Turkey, and Iran

Pravov, I. A., V. A. Matveyev, and E. E. Lomov. Attempt at Detailed Seismic Regionalization Based on One of the Districts of Western Siberia

Pravov, I. V. Seismic Microregionalization of the Area of the Ashkhabad Earthquakes of 1948 Based on Instrumental Data

Korotkiy, E. P. Variations in the Tilt of the Earth's Surface and Seismicity (Based on the Example of the Mountainous Regions of Southern Central Asia)

DZOTSENIDZE, G.S.; SKHIRTLADZE, N.I.; CHECHELASHVILI, I.D.; RUBINSHTEYN, M.M.,
red.; BAKRADZE, D.S., red, 1st.; DZHAFARIDZE, N.D., tekhn, red.

[Lithology of Bathonian sediments in Okriba] Litologiya batskikh
otlozhenii Okriby. Tbilisi, Izd-vo Akad.nauk Gruz.SSR, 1956. 185 p.
(Akademiia nauk Gruzinskoi SSR. Tiflis. Institut geologii i
mineralogii. Monografii, no.7) (MIRA 12:3)
(Okriba--Sediments (Geology))

RUBINSHTEYN, M. M.

15-1957-7-9207

Translation from: Referativnyy zhurnal, Geologiya, 1957, Nr 7,
p 59 (USSR)

AUTHOR: Rubinshteyn, M. M.

TITLE: Some Questions on the Seismotectonic Features of Gru-
ziya (Nekotoryye voprosy seysmotehtoniki Gruzii)

PERIODICAL: Tr. soveshchaniya po tektonike al'piysk. geosinklinal'-
noy obl. yuga SSSR. Baku, AN AzSSR, 1956, pp 97-104

ABSTRACT: An analysis of seismic data of the Tbilisi seismograph
station has shown a relationship between the earth-
quakes of Gruzziya and the Zakavkaz'ye (trans-Caucasus)
and a series of fractures, some of which are localized
in lower structural zones and are not accessible to
direct observation. In addition to comparatively shal-
low earthquake foci (16-18 km), deeper fractures are
noted. The majority of seismically active fractures
belong to the group of young or very young disloca-
tions. The systematic shifting of the epicenters with

Card 1/2

Some Questions on the Seisomotectonic Features of Gruzija (Cont.) 15-1957-7-9207

time along the fractures has been investigated. In the case of a sequence of earthquakes, a gradual shifting of the epicenters in a definite direction along the fracture has been observed, which is in contrast to the behavior of the earthquake aftershocks. The principal seismically active line of the Bol'shoy Kavkaz (main Caucasus) is confined to a zone of conjugate fractures extending from Kazbek to Shemakha.

Card 2/2

V. M. Zaporozhets

RUBINSHTEYN, M.M.

Geological criteria of the division of Georgia into seismic regions. Biul. Sov. po seism. no.8:116-120 '60. (MIRA 13:10)

1. Geologicheskoy institut AN Gruzinskoy SSR.
(Georgia--Seismology)

RUBINSHTBYN, M.V.

Fluctuations in the height of the bases of clouds. Meteor. i gidrol.
no.5:9-13 My '63. (MIRA 16:5)

1. TSentral'nyy institut prognozov.
(Clouds)

YEVYUKHOVICH, Yu.I.; RUBINSHTEYN, M.Ye.

Clinical and anatomic observations of superficial hemangiomas.
Trudy Vor. med. inst. 52:207-209 '63.

(MIRA 18:3)

RUBINSHTEYN, M.Ye.; SHTYRKOVA, Ye. A.

Alkaline method of obtaining starch from flour and the liquidation of the seasonal production in the starch and sirup industry. Sakh. prom. 35 no.2:61-65 F '61. (MIRA 14:3)

1. Tsentral'nyy nauchno-issledovatel'skiy institut krakhmalo-patochnoy promyshlennosti.
(Starch industry) (Flour)

BARCH, I.Z., nauchnyy sotrudnik; RUBINSHTEYN, M.Z., nauchnyy sotrudnik;
PONOMARENKO, N.I., nauchnyy sotrudnik

Method of developing progressive standards for the time re-
quired to build production units for ferrous metallurgy.

Trudy MIEI no.15:372-378 '61.

(MIRA 14:12)

1. Yuzhnyy nauchno-issledovatel'skiy institut po stroitel'stvu
Akademii stroitel'stva i arkhitektury USSR.
(Machinery--Erecting work)

BARCH, I.Z., inzh.; DZHIOYEV, I.M., inzh.; PONOMARENKO, N.I., inzh.;
ROBINSETEYN, M.Z., inzh.; GURVITS, A.I., inzh., nauchnyy red.;
VLASOV, P.Ye., red.izd-va; SOLNTSEVA, L.M., tekhn.red.

[Using sectional reinforced concrete construction in building
blast furnace plants] Primenenie sbornykh zhelezobetonnykh
konstruktsii na stroitel'stve ob'ektov domennykh tsekhov.
Moskva, Gos.izd-vo lit-ry po stroit., arkhitekt. i stroit.mate-
rialam, 1959. 63 p. (MIRA 12:8)
(Metallurgical plants--Design and construction)
(Precast concrete construction)

SHIRIN, P.K. (Moskva); POVERMNNYY, L.D. (Moskva); KAMENNY, M.O. (Moskva);
BARCH, I.Z., inzh. (Khar'kov); PUSHKAREV, V.V. (Novosibirsk);
BALABAN, A.I. (Khar'kov); DZHIOTEV, I.M. (Khar'kov); RUBINSHTAYN,
M.Z. (Khar'kov); RYABCHICH, V.F. (Magnitogorsk); SOLOVYOV, K.F.,
(Khar'kov); KHODOROVSKAYA, O.R. (Khar'kov); NEFEDOV, Ye.M. (Leningrad).

Discussion on plans and regulations for the organization and the
technology of building. Stroi. prom. 35 no.12:5-20 D '57.

(Architecture--Designs and plans)

(MIRA 11:1)

(Construction industry)

RUBINSTEIN, N. M.

"Investigation of the Alkaloids Sphaerophysa Salsula. Part II. Structure of Sphaerophysine and Partial Synthesis of Dithydrosphaerophysine and Isodihydrosphaerophysine" Rubinstein, N. M., and Menshikov, G. P. (p. 172)

SO: Journal of General Chemistry (Zhurnal Obshchei Khimii) 1944, Volume 14, no. 3

RUBINSHTEYN, M.Ya.

Present-day importance of and prospects for the utilization
of sorghum (from "Cereal Science Today" no.8, 1959). Sakh.
prom. 34 no.3:58-60 Mr '70. (MIRA 13:6)
(Sorghum)

ROBINSHTEYN, M Ya.

CHARACTERISTICS

3

RUBINSHTEY, M.Ye.
LIBERMAN, I.M.; RUBINSHTEY, M.Ye.

Oxygen for treating ascariasis. *Pediatrics* no.8:76 Ag '57. (MIRA 10:12)

1. Iz kafedry detskikh bolezney lechebnogo i sanitarno-gigiyenicheskogo fakul'teta Dnepropetrovskogo meditsinskogo instituta i detskoy klinicheskoy bol'nitsy Kirovskogo rayona goroda Dnepropetrovska.
(OXYGEN--THERAPEUTIC USE) (ASCARIDS AND ASCARIASIS)

RUBINSHTEYN, M.Ye.; GELIER, I.Ye.

Treatment of hymenolepiasis in chronic dysentery in children. Med.
paraz. i parax. bol. no.4:302-304 O-D '54. (MLRA 8:2)

1. Iz kafedry detskikh bolezney lechebnogo fakul'teta Denpropetrov-
skogo meditsinskogo instituta (i.o. zav. kafedroy dotsent I.B.Baskina)
i yasley dlya detey s khronicheskoy dizenteriei (zav. B.Yu.Kamkhina)
(DYSENTERY, BACILLARY, in infant and child,
with hymenolepiasis, ther., pumpkin seeds)
(TAPEWORM INFECTION, in infant and child,
hymenolepiasis, ther., pumpkin seeds, in bacillary dysentery)
(SEEDS,
pumpkin seeds, ther. of hymenolepiasis in bacillary
dysentery in child.)

RUBINSHTEYN, M.Z.

DZHIORYEV, I.M., inzh.; RUBINSHTEYN, M.Z., inzh.

Constructing precast reinforced concrete bin trestles. Bat. 1 zhel.-
bet. no. 3:96-100 Mr '58. (MIRA 11:3)
(Blast furnaces) (Precast concrete construction)

RUBINSHTEYN, N. A.

"Semiplant Experiments with the Carbonation of $(\text{NH}_4)_2\text{SO}_4$ Solutions in Honigmann Apparatus," A. P. Belopol'skiy, A. M. Polyak, N. A. Rubinshteyn, N. P. Aleksandrov, V. V. Rusov, Ye. F. Yablonskiy, Works of the Sci Inst of Fert and Insectofung in Ya. V. Samoylov, 1940, 130-52 pp, Khim Referat Zhur IV, No 6, pp 83 (1941) (SEE: Inst. Insect/Fungi. in Ya. V. Samoylov)

SO: U-237/49, 8 April 1949

RUBINOVICH, N

vneshnyaya Politika Sovetskogo gosudarstva v 1921-1925 godakh [The Foreign Policy of the Soviet Government, 1921-1925] Moskva, Gos. izd-vo Politicheskoy Literatury, 1953.

566 p.

bibliographical footnotes.

N/5

122

.R8

GALUSHIN, V.M.; LIKHOPEK, Ye.A.; LOGUNOVA, F.N.; RUBINSHTEYN, N.A.

Gulls in the southeastern Yamal Peninsula. Uch. zap. MGPI no.227:
279-290 '64. (MIRA 18:11)

RUBINSHTEYN, N.L.

Topographic description of vicereencies and provinces of the 18th
century monuments of a geographic and economic study of Russia.

Vop.geog. 31:39-89 '53.

(MLRA 7:6)

(Geography, Economic)

Rubinshteyn, M

Usperebreniye mezhdunarodnykh pozitsiy Sovetskogo Soyuza v period perekhoda na mirnyy rabotu po vosstanovleniyu narodnogo khozyaystva, 1921-1925 gg.
(Statement of the USSR's international position in the period of its transition to peacetime work for the reestablishment of the national economy) Moskva, "Pravda", 1951.

39 p.

Cataloged from abstract.

Lecture deals with successes of Soviet foreign policy 1921, the rebuff to the approach of capitalistic countries in connection with starvation in the Volga provinces and Soviet Russia's representatives at conferences in Geneva and the Hague.

N/5
11k.18
.39

RUBINSHTEIN, Nikolai Leonidovich

RUBINSHTEIN, Nikolai Leonidovich, 1902- 1929 god - The year of 1929 - a year of the great change; lecture. Moskva. Gos. izd-vo polit. lit-ry, 1939. 30 p.

RUBINSTEIN, Nikolai Leonidovich, 1902-1952.

Foreign policy of the Soviet Union in 1921-1925. Moskva. Gos. izd-vo polit. lit-ry, 1953
566 p. (54-35140)

1. Russia - For. rel. - 1917-1945.

RUBINSHTEYN, Nikolay Leonidovich; EKHIN, P., red.; FRIDBERG, L., red.;
MUKHIN, Yu., tekhn.red.

[Agriculture in Russia during the second half of the 18th century;
a study in economic history] Sel'skoe khoziaistvo Rossii vo vtoroi
polovine XVII v.; istoriko-ekonomicheskii ocherk. Moskva, Gos.izd-vo
polit.lit-ry, 1957. 494 p. (MIRA 10:12)
(Agriculture--History)

RUBINSHTEYN, N.M.

New method of producing ammonium perrhenate. Vest. AN Kazakh.SSR 19 no.10:
101-104 0 '63. (MIRA 17:1)

EXCERPTA MEDICA Sec 7 Vol.12/6 Pediatrics June 58

1693. AN EFFORT TO COMPLETE RECOVERY IN CHILDREN CONVALESCENT FROM TUBERCULOUS MENINGITIS UNDER CONDITIONS OF SANATORIUM TREATMENT (Russian text) - Rubinstein P. A. - TRUD. II. SEZDA VRAC. - PEDIAT. USSR 1956 (213-219)

Sixty-three children were admitted to a sanatorium after a course of specific treatment in hospitals, with the CSF still not normal. In 55 children the CSF became normal without additional specific treatment, only under the influence of a suitable regimen with lengthy stay in fresh air, wholesome food and properly organized schoolwork. Physical culture, massage, local hydrotherapeutic procedures restored to a marked degree the motor functions in children with manifestations of hemiparesis. The rate of motoric restoration depends not only on the character and severity of the lesion, but also on the activity of the patient. Under the conditions of sanatorium treatment, concomitant tb manifestations regressed under the influence of the comprehensive therapy. The ESR became lower, the haemoglobin content increased and the general state improved. The general conditions in the sanatoria and correctly organized schoolwork are also contributory to the elimination of the neuropathic overlay affecting the child's behaviour. (S)

1ST AND 2ND ORDERS																										3RD AND 4TH ORDERS																									
PROCESSES AND PROPERTIES INDEX																										PROCESSES AND PROPERTIES INDEX																									
Plasmodium praecox in experimental malaria in birds. I. I. KRICHVAKIT AND P. L. RUDINSKIY. <i>Khim. Farm. Prom.</i> 1932, 423. In exptl. malaria in birds plasmodium praecox, after preliminary treatments, develops resistance to quinine but not to plasmochin. L. NABAREVICH																										11h																									
ASO. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION																										ASO. S.L.A. METALLURGICAL LITERATURE CLASSIFICATION																									
100% 100%																										100% 100%																									

Robinson, R. L.
"The Role of the Reticuloendothelial System in Infection and Etiotropic Therapy,"
in the book: Problemy immuniteta (Problems of Immunity), 19-108, Moscow-Leningrad, 1941

PROCESSIES AND PROPERTIES INDEX																									
1ST AND 2ND ORDERS													3RD AND 4TH ORDERS												
Chemotherapy of experimental dysentery in white mice. P. L. Rubinshteln. <i>Zhur. Mikrobiol., Epidemiol. Immunobiol.</i> 1946, No. 4, 63-5. -- White mice were infected with toxin-free dysentery bacteria of the highly virulent Shiga and Flexner strains, and others were injected with bacteria-free endotoxins of these strains. With 40 mice per exptl. variant, animals of each type were treated with 60-80 mg. per 20 g. mouse, administered <i>per os</i>, of sulfadine, sulfamethylthiazole, neosulfadine, and esulfadine. In both infected and toxin-treated mice without therapeutic treatment, mortality was 90-100%. Any of the above compds. reduced this to about 60% mortality in either case. Sulfadine reduced mortality slightly more than the other compds. but the last 2 new synthetic compds. were very nearly as effective. K. Starr Chester																									
ASAC-SCA METALLURGICAL LITERATURE CLASSIFICATION																									
STOM: LIVELIENH																									
STOM: LIVELIENH																									

RUBINSHTEYN, P. L.

USSR/Medicine - Dysentery

Jul 53

"Experimental Sonne Dysentery in Monkeys and Protective Inoculation Against This Disease,"

V. L. Troitskiy, P. L. Rubinshteyn, V. D. Gekker,

A. S. Aksenova, Inst of Epid and Mikrobiol im

N. F. Gamaleya, Acad Med Sci, USSR, Sukhumi Med-Biol Sta, Acad Med Sci USSR

Zhur Mikro, Epid, i Immun, No 7, pp 58-63

Rhesus monkeys could be infected with Sonne dysentery, but not with Flexner dysentery.

They apparently often carry Flexner bacilli and become resistant to them. On clinical recovery,

267T47

the infected monkeys continued to carry and eliminate Sonne bacilli for a long time. The antigenic and immunogenic properties of Sonne bacilli passed through monkeys did not undergo any significant changes. Monkey strains of Flexner bacilli were found to differ from human strains in that they have an additional receptor.

RUBINSHTEYN, P.L.

Streptomycin-resistant and streptomycin-dependent variants of the
causative organism of pest. Antibiotiki, Moskva 9 no.2:50-53 Mar-Apr
56 (MLRA 9:3)

1. Laboratoriya osobo opasnykh infektsii (zav.-prof. M.P.
Pokrovskaya) Gosudarstvennogo kontrol'nogo instituta syvorotok i
vaksin imeni L.A. Tarasevicha.

(PASTEURELLA PESTIS, eff. of drugs on
streptomycin-resistant & streptomycin-dependent
variants)

(STREPTOMYCIN, eff.
on Pasteurella pestis, streptomycin-resistant &
streptomycin-dependent variants)

RUBINSHTEYN, P.L.

Effect of antibiotics on streptomycin-resistant and dependent strains of *Pasteurella pestis* in the organism; experimental studies. Antibiotiki 3 no.5:79-83 S-0 '58. (MIRA 12:11)

1. Gosudarstvennyy kontrol'nyy institut syvorotok i vaktsin imeni L.A.Tarasevicha.

(PLAGUE, exper.

eff. of antibiotics on infect. induced by streptomycin-resist. & dependent strains (Rus))

(STREPTOMYCIN, effects,

on *Pasteurella pestis*, exper. infect. with resist. & dependent strains, eff. of other antibiotics (Rus))

(ANTIBIOTICS, eff.

on exper. plague induced with streptomycin-resist. & dependent strains (Rus))

1ST AND 2ND GROUPS										3RD AND 4TH GROUPS									
PROCESSES AND PROPERTIES INDEX																			
26																			
<i>Theory of Polymolecular Adsorption. (In Russian.)</i> A. A. Gukhovitskii and P. N. Rubinshtein. <i>Doklady Akademii Nauk SSSR</i> (Reports of the Academy of Sciences of the USSR), new ser., v. 65, Mar. 1, 1949, p. 41-44. Proposes a new formulation of the above theory applicable to a plain homogeneous adsorbent only. 14 ref.																			
ASH-SLA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 2ND GROUPS										3RD AND 4TH GROUPS									
COMMON VARIABLE INDEX																			

RUBINSTEYN, R.

USSR/Chemistry - Catalysis
Chemistry - Kinetics

Nov/Dec 46

"The Kinetics of Contact Reactions Over Catalysts," S. Pshezhetskiy, R. Rubinsteyn,
Karpov Inst Phys Chem, Moscow, 14 pp

"Acta Physicochimica URSS" Vol XXI, No 6

Shows development of simple relation between concentration of various components of the reaction, and reduction of system of equations describing process to an equation for diffusion of only one of components. Relation is approximately true in presence of a temperature gradient within granule of catalyst. A general form of analytical expression for relation between the observed and true rates of heterogeneous catalytic reactions. Received, 18 Mar 1946.

PA 54T34

1ST AND 2ND QUANT.		PROCESS AND PROPERTIES INDEX		3RD AND 4TH QUANT.	
1A		The velocity of moisture absorption by magnesium sulfate. A. S. Mikulinskii and R. I. Rubinshtein. <i>J. Phys. Chem.</i> (U. S. S. R.) 9, No. 3, 451-454 (1957). An attempt was made to investigate the process of moisture absorption by hygroscopic salts. For exptl. material the previous results of the moisture absorption velocity of $MgSO_4$ hydrates were taken (cf. <i>C. A.</i> 30, 6620¹). The process of moisture absorption can be divided into two steps: the surface absorption [given by $dW/dt = A(p - p_0)$, where dW/dt = amt. of the absorbed moisture in unit of time, p = vapor pressure of water in air, p_0 = vapor pressure over the salt, A = coeff. of proportionality] and the diffusion of the moisture inside of the substance (given by $dC/dt = K\Delta C$, where C = moisture concn. at each point inside the salt, Δ = Laplace's operator, K = diffusion coeff.). $MgSO_4 \cdot 7H_2O$ has moisture absorption curves that are similar to those of the mono- and the di-hydrates, but has a break in the curve, because its final soln. (in contrast to that of the other hydrates) is of a definite concn. The diffusion coeffs., K, for $MgSO_4 \cdot 2H_2O$ and for $MgSO_4 \cdot H_2O$ in an atm. satd. with water vapor were calcd. Given in the form K/p they showed a fair constancy. The mean K/p values (t = up to 720 hrs.) for the nonconglomerated $MgSO_4 \cdot 2H_2O$ were 3.3×10^{-4} and 3.0×10^{-4} for the conglomerated, and for $MgSO_4 \cdot H_2O$ they were 3.3×10^{-4} and 2.7×10^{-4}, resp. The max. deviations were 22 and 31% for $MgSO_4 \cdot 2H_2O$ and 12 and 26% for $MgSO_4 \cdot H_2O$. 4 references. W. R. Henn		2	
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION					
1ST QUANT.		2ND QUANT.		3RD QUANT.	
1A		1A		1A	

POPOV, I.P., kandidat biologicheskikh nauk; RUBINSHTEYN, R.L., inzhener;
SHATROVA, Ye.S., redaktor; GUROVA, O., tekhnicheskiiy redaktor.

[Dyeing and redyeing] Otkraska i perekraska odezhdy. Moskva, Izd-vo
Ministerstva kommunal'nogo khoziaistva RSFSR, 1952. 84 p.
(Dyes and dyeing) (MLRA 8:1)

RUBINSHTEIN, R.H.; POSTNIKOV, I.V.

Diffusion under nonlinear boundary conditions. Zav. lab. 31
no. 4:444-450 '65. (MIRA 18:12)

PROCESSES AND PROPERTIES INDEX																																							
BC Calculation of the activation energy of de- hydration of magnesium sulfate. A. S. MIKU- LINSKI and R. N. KUMAR (J. Phys. Chem. Russ., 1986, 8, 608-617).—The accuracy of the result obtained (cf. preceding abstract) is discussed. E. R.																																							
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																																							
<table border="1"> <thead> <tr> <th colspan="10">SUBJECT INDEX</th> </tr> </thead> <tbody> <tr> <td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td><td>8</td><td>9</td><td>10</td> </tr> <tr> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </tbody> </table>										SUBJECT INDEX										1	2	3	4	5	6	7	8	9	10										
SUBJECT INDEX																																							
1	2	3	4	5	6	7	8	9	10																														

COMMON ELEMENTS										PROCESSES AND PROPERTIES INDEX										100 AND 175 CORDERS									
CA																				9									
Reduction of magnesium oxide by calcium carbide. A. S. Mikulinskii and R. N. Rubinshtein. <i>Lekkie Metal.</i> 6, No. 10, 15-18 (1967). MgO and CaC₂ were heated to 850-1200° under a pressure of about 1 mm. Hg in an iron tube contg. a small water-cooled tube to condense the Mg. Reduction of MgO began at 900°. At 1200° 100% of the MgO was reduced in 2 hrs. H. W. Rathmann																													
AS N. S. A. METALLURGICAL LITERATURE CLASSIFICATION																													
100 AND 175 CORDERS										100 AND 175 CORDERS										100 AND 175 CORDERS									

1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
PROCESSES AND PROPERTIES INDEX																			
<i>Ca</i> Kinetics of heterogeneous reactions on porous catalysts. S. A. Pshchetskii and R. N. Rubinshtein (Karpov Inst. Phys. Chem., Moscow). <i>J. Phys. Chem. (U.S.S.R.)</i> 20, 1127-36(1946)(in Russian); <i>Acta Physicochim. U.R.S.S.</i> 21, 1075-88(1946)(in English).—The diffusion of the reactants to the surface of a porous catalyst is discussed. The conditions are defined under which (a) no hydrodynamic flow is created by the reaction, (b) the diffusion of only one reactant needs to be considered, and (c) the temp. gradient within the catalyst grain has a measurable effect. A math. relation between the measurable and the true reaction rate is given. J. J. Bikerman																			
ASA-STA METALLURGICAL LITERATURE CLASSIFICATION																			
1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									
1ST AND 2ND ORDERS										3RD AND 4TH ORDERS									

1ST AND 10TH CODES		PROCESSES AND PROPERTIES INDEX		100 AND 6TH CODES	
<i>CA</i> Progress of heterogeneous catalytic reactions in a stream. 1. General equations. A heat-insulated system. S. Ya. Piskunovskii and R. N. Rubinshteyn (Karpov Inst. Phys. Chem., Moscow). <i>J. Phys. Chem.</i> (U.S.S.R.) 20, 1421-34(1946)(in Russian).—A general quant. theory is given for the steady state of heterogeneous reactions taking place when a gas stream through a bed of catalyst. The rate of the over-all reaction can be detd. by the rate of the actual reaction process, by the rate of diffusion toward the catalyst, or by that within the grains of the catalyst. The temp. of the heat-insulated catalyst is calcd. for different rates of flow, concns. of the components, and lengths of the bed. The retardation due to reaction products is considered. J. J. Bikerman					
ASB.SLA METALLURGICAL LITERATURE CLASSIFICATION					
1000 1000 1000 1000 1000 1000					

16

283. Psychrometric Method for Determination of Vapor Concentrations in Vapor-Air Mixtures. (In Russian.) R. N. Rubinshtein and R. I. Borodulina. *Factory Laboratory* (U.S.S.R.), v. 13, Aug. 1947, p. 976-982.

The psychrometer is widely used for determining water-vapor concentrations. Describes development of a method for determination of the concentration of any vapor air mixture, such as benzene air, etc., using the psychrometer.

AS 5.4 METALLURGICAL LITERATURE CLASSIFICATION

[illegible]

RUBINSHTEYN, R. N.

Apr 1947

USSR/Chemistry - Reactions
Chemistry - Gases

"The Theory of the Dynamic Method of Measuring the Rates of Gaseous Reactions,"
S. Ya. Pshezhetskiy, R. N. Rubinshteyn, 9 pp

"Zhur Fiz Khim" Vol XXI, No 4

Mathematical discussion determining the relation between the speed of reactions
and the original components of concentrations, computing the inverse reaction,
and evaluating the variation of volumetric speed. Fully illustrated with formulae.

PA 14T93

RUBINShtein, R. N.

USSR/Chemistry - Reactions

Jun 1947

"The Formal Theory of Simultaneous (Complex) Reactions," S. Ya. Pshezhetskii,
R. N. Rubinshtein, 15 pp

"Zhur Fiz Khim" Vol XXI, No 6

Discusses isothermic and adiabatic conditions, determination of speed of individual
reaction and examples for application of methods in the treatment of complex
reactions.

PA 14T105

RUBINSHTEYN, R. N.

4

The kinetics of diffusion on porous catalysts. S. Ya. Pakheretskii and R. N. Rubinshtein. *Problemy Kinetiki i Kataliza*, Akad. Nauk S.S.S.R. 6, *Geterogenyyi Kataliz* 428-31 (1949).—The problem of the diffusion kinetics on a porous catalyst is discussed. The case of porous catalysts differs from the kinetics on other catalysts because of the necessity of using averaged values for the rate and diffusion consts. Equations are given relating the reaction rate to concn. and surface temp. The need for a detailed study of the phenomena, the pore statistics being considered, is stressed. I. Rovtar Leach

①

RUBINSHTEYN, R. N.

USSR/Chemistry - Absorption, Polymolecular
Chemistry - Absorbents

Mar 49

"The Theory of Polymolecular Absorption," A. A. Zhukhovitskiy, R. N. Rubinshteyn,
Moscow Inst of Steel imeni Stalin, 4 pp

"Dok Ak Nauk SSSR" Vol LXV, No 1

Presents formulation of theory which calculates interaction between the absorbed molecules, methods of performing calculations, approximate formulas, and consideration of the principles and areas of application of Brunauer's formula. The theory holds for smooth, homogeneous absorbent. Submitted by Acad N. N. Semenov, 7 Jan 49.

PA 29/49T12

RUBINSHTEYN, R. N.

PA 50/49T23

USSR/Chemistry - Adsorption

May 49

"Determining the Surface of an Adsorbent," A. A. Zhukhovitskiy, R. N. Rubinshteyn, Steel Institute I. V. Stalin, 3 pp

"Dok Ak Nauk SSSR" Vol LXVI, No 1

Formulates a method to determine surface according to adsorption isotherms which is better than that of Brunauer, Emmet and Teller. It is applied to two cases where adsorption heat is more important than condensation heat. Submitted by P. A. Rebinder, 4 Mar 49.

50/49T23

RUBINSHTEYN, R.N.; KARPEL', P.G.

Using nomographic computation methods in the practice of spectrum analysis. Izv. AN SSSR. Ser. fiz. 19 no.1:128-129 Ja-F '55.

(MIRA 8:9)

(Spectrum analysis) (Spectrometer)

✓ Adaptation of nomographic procedure of calculations to
spectrographic analysis R. N. Rubinshtein and N. G.

2

0003

1-4-84

RUBINSHTEYN, R.N.

Category : USSR/Electronics - Vacuum Technique

H-9

Abs Jour : Ref Zhur - Fizika, No 2, 1957, No 4391

Author : Rubinshteyn, R.N., Fistul', V.I.

Title : ~~Method of Graduating Thermoelectric Manometers~~

Orig Pub : Zavod. laboratoriya, 1956, 22, No 2, 241-244

Abstract : Description of a method for plotting the graduation curve of a thermoelectric manometer from the voltage-current characteristics of the latter, plotted at a constant pressure, and using one point on the pressure-dependence curve. The method is suitable for all gases and vapors.

RUBINSHTEYN, R. N.

Category: USSR/Analytical Chemistry - Analysis of inorganic substances.

G-2

Abs Jour: Referat Zhur-Khimiya, No 9, 1957, 31037

Author : Rubinshteyn R. N., Karpel' N. G.

Inst : not given

Title : Determination of Organic Contaminations Upon the Surface of Metal Parts by the Spectral Method.

Orig Pub: Zavod. laboratoriya, 1956, 22, No 111, 1327-1330

Abstract: On the assumption that the contaminations consist of grease, CH, C₂ and H₂ spectrum is excited in high-frequency discharge of type 9008 generator of RFT manufacture. of 2 Mhz frequency and 300 W power rating. The part is placed in branch of electrodeless glass tube on which are wound 10-15 turns of wire. During discharge air is evacuated and helium is introduced to a pressure of 10 mm Hg. The tube is sealed off and the helium is purified by freezing in liquid nitrogen. Thereafter the part is moved, by means of a magnet, into the field of the coil, and spectra are photographed in

Card : 1/2

-56-

24 (2), 24 (3)

AUTHORS: Rubinshteyn, R. N., Fistul', V. I. SOV/20-125-3-21/63

TITLE: The Determination of the Surface Conductivity of
Semiconducting Crystals by the Method of the "Wedge"
(Opredeleniye poverkhnostnoy provodimosti poluprovodnikovyykh
kristallov metodom "klina")

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 3,
pp 542-545 (USSR)

ABSTRACT: For the investigation of the surface properties of germanium
and silicon it is advantageous to have a method (among the
other methods) for the unequivocal determination of the
surface conductivity σ_{sur} . It is assumed that the surface
conductivity may cause a certain (sometimes very essential)
increase of the reverse current in the semiconductor diodes.
The methods of the surface treatment of germanium (silicon)
crystals in any practical case must change the surface
conductivity, but the hitherto published papers contain no
information concerning direct methods for the measurement
of this surface conductivity. In the present paper, a method
is proposed for the immediate measurement of σ_{sur} , which the

Card 1/4

The Determination of the Surface Conductivity of
Semiconducting Crystals by the Method of the "Wedge"

SOV/20-125-3-21/53

authors call the "wedge" method. The first paragraph of the present paper deals with the theory of this method. It relies on the ordinary two-sound method for the measurement of the specific resistance of semiconducting crystals. The sample used for the measurements must have the shape of a wedge. Formulae are given or derived for the surface current, for the volume current, and for the surface conductivity. By measuring the gradient of the potential along the wedge and by evaluating the results found according to the above-mentioned formulae the volume conductivity and the surface conductivity can be determined. Conditions for the validity of the above-mentioned equations are discussed in short:

- 1) The current lines within the wedge must have a small value of the curvature.
- 2) The contact metal-semiconductor in the places of current supply must be Ohmic.
- 3) The material of the wedge must be homogeneous.

The first condition is quite acceptable for small angles α of the wedge. The above-mentioned equations begin to hold at a certain distance from the contacts where the energy barriers and the injections of the charges exert no influence any longer. The third

Card 2/4

The Determination of the Surface Conductivity of
Semiconducting Crystals by the Method of the "Wedge"

SOV/20-125-3-21/63

condition is rarely satisfied in practice. The second paragraph of the present paper deals with the experimental results. In order to verify this method, the authors prepared wedge-like samples of monocrystalline germanium and silicon of different specific electric resistance. These wedges had angles of 5° . A diagram shows the distribution of $d\varphi/dx$ for 2 characteristic cases. $d\varphi/dx$ denotes the gradient of the potential in the point x . The third diagram gives the results of the measurement of the quantity $A = 2\sigma_{\text{sur}} + ((2\sigma_{\text{sur}}/S) + \sigma_0) \times \lg \alpha$ for a sample of homogeneous germanium before and after etching in H_2O_2 . The evaluation of the results permits the following conclusion: The etching changes the surface conductivity from $0.23 \cdot 10^{-2} \text{ Ohm}^{-1}$ to $0.15 \cdot 10^{-2} \text{ Ohm}^{-1}$. The investigation of a wedge produced from inhomogeneous germanium offered similar results as in the above-mentioned case. In several cases, the above-discussed method was applied also to silicon samples. The results agree well with

Card 3/4

The Determination of the Surface Conductivity of
Semiconducting Crystals by the Method of the "Wedge"

SOV/20-125-3-21/63

those of measurements according to the two-sound method. The "method of the wedge" permits comparative measurements of surfaces treated in different ways in order to find a manner of treatment which offers a minimum value of surface conductivity. There are 4 figures and 1 Soviet reference.

PRESENTED: December 25, 1958, by A. P. Ioffe, Academician

SUBMITTED: December 15, 1958

Card 4/4

L 52225-65 EWT(d) Pg-4 IJP(c)

ACCESSION NR: AP5009915

UR/0032/65/031/004/0444/0450
532.72

AUTHORS: Rubinshteyn, R. N.; Postnikov, I. V.

20
B

TITLE: Diffusion at nonlinear boundary conditions

SOURCE: Zavodskaya laboratoriya, v. 31, no. 4, 1965, 444-450

TOPIC TAGS: nonlinear system, ordinary differential equation, diffusive motion, impurity content, evaporation

ABSTRACT: The impurity distribution in the volume of a solid body during evaporation is studied analytically. When the vapor is in equilibrium with the solid phase of monatomic molecules, the problem is shown to be linear.

Card 1/4

L 52225-65

ACCESSION NR: AP5009915

0

$$\begin{aligned} D \frac{\partial C}{\partial x} \bigg|_{x=+l} &= -A_n C^n, \\ D \frac{\partial C}{\partial x} \bigg|_{x=-l} &= A_n C^n, \end{aligned}$$

the diffusion equation is obtained in the form

$$\frac{dU}{d\varphi} = -\sigma^n U,$$

where

$$\begin{aligned} U &= \frac{\bar{C}}{\left(\frac{D}{A_n l}\right)^{\frac{1}{n-1}}}, \\ \varphi &= \frac{Dx}{l}. \end{aligned}$$

and σ is the first root of the transcendental equation

$$\sigma^n = 1 \quad (\text{sig } \sigma) \quad \sigma^n = \frac{1}{U}.$$

CIA-RDP86-00513R001445820011-5"

Card 2/4

L 52225-65

ACCESSION NR: AP5009915

The asymptotic solutions of these equations are discussed briefly for $U \ll 1$ and $U \gg 1$, and then a numerical solution is obtained for $n = 2$ and is plotted graphically. Also plotted are the functions $dU/d\varphi$ versus φ and the concentration distribution $C(x)$ from the equation

$$\frac{C(x)}{\bar{C}} = \sigma_1 \frac{\cos \sigma_1 \frac{x}{l}}{\sin \sigma_1}$$

which is the solution of the diffusion equation with the linear boundary conditions

$$\begin{cases} D \frac{\partial C}{\partial x} \Big|_{x=+l} = -AC \\ D \frac{\partial C}{\partial x} \Big|_{x=-l} = AC \end{cases}$$

These results are shown to be directly applicable to the desorption process with convex Freyndlikh type isotherms. Orig. art. has: 22 equations and 5 figures.

Card 3/4

L 52225-65

ACCESSION NR: AP5009915

ASSOCIATION: none

SUBMITTED: 00

ENCL: 00

SUB CODE: ME

NO REF SOV: 003

OTHER: 000

Ref
Card 4/4

RUBINSHTEYN, R.N.; POSTNIKOV, I.V.; VASIL'YEV, I.G.

Study on diffusion under nonlinear boundary conditions. Zav.
lab. 30 no.7:806-812 '64. (MIRA 18:3)

GALKINA, N.K.; RUBINSHTEYN, R.N.; SENYAVIN, M.M.

Statics of exchange of a mixture of ions. Zhur. fiz. khim. 36
no.9:1860-1969 S '62. (MIRA 17:6)

1. Institut geokhimi i analiticheskoy khimii imeni Vernadskogo,
Moskva.

RUBINSHTEYN, R.N.

"Physical chemistry" by A.A.Zhukhovitskii, L.A.Shvartsman.
Reviewed by R.N.Rubinshtein. Zav.lab. 29 no.11:1402 '63.
(MIRA 16:12)

KOZLOVSKAYA, V.M.; RUBINSHTEYN, R.N.

Calculation of solubility and vapor pressure for semiconductor -
impurity systems. Fiz.tver.tela 3 no.11:3354-3362 N '61.

(MIRA 14:10)

(Semiconductors)

187500

30038

S/032/61/027/011/005/016

B116/B102

AUTHORS: Postnikov, I. V., and Rubinshteyn, R. N.

TITLE: Determination of the diffusion coefficients and the solubility of volatile elements in a solid solution

PERIODICAL: Zavodskaya laboratoriya, v. 27, no. 11, 1961, 1364-1369

TEXT: The authors describe a method for determining the diffusion coefficients and the relation between the vapor pressure and the concentration of volatile admixtures in a solid solution. This method is then used to determine the diffusion coefficients and the concentration of antimony in germanium. It is based on the theory of regular conditions. The sample used is alloyed with a volatile admixture and then annealed in vacuo. After a certain time, the concentration of the alloying component is given

by $C(x, y, z, \tau) = A \exp \left\{ -\frac{\lambda^2 \tau}{l^2} \right\} f(x, y, z, \lambda) \quad (1)$. Since the distribution function $f(x, y, z, \lambda)$ is not time-dependent and if radioisotopes are

Card 1/65

30038

S/032/01/027/011/005/016

B116/B102

Determination of the diffusion ...

alloyed, the following relation will be valid under regular conditions:

$$\log \frac{I}{I_0} = -0.43 \frac{\lambda^2 D t}{l^2} + \text{const } (3), \text{ where } \lambda \text{ is a constant determined by the}$$

shape of the sample and by the dimensionless parameter $\frac{\alpha \bar{v} l}{D}$; $f(x, y, z, \lambda)$ does not depend on the amount of admixture and on the method of addition; A is a constant dependent on the initial distribution; D is the diffusion coefficient; l is the characteristic dimension of the sample; $\bar{v}$ is the arithmetic mean of the thermal velocity of the volatile molecule; α is the accommodation coefficient; $\Gamma = C_{\text{surface}}/n_{\text{surface}}$, where C_{surface} is the concentration of diffusing admixture at the surface of the solid, and n_{surface} is the concentration of diffusing admixture in the gaseous phase (where n_{surface} is in equilibrium with C_{surface}); I is the radiation intensity of the sample, and I_0 is that of a standard. If $\frac{\alpha \bar{v} l}{D} \gg 1$, the distribution expressed by (1) will remain unchanged even at another

Card 2/0 5

Determination of the diffusion ...

30038
S/C32/61/027/011/005/016
B116/B102

temperature. This fact may be utilized to study the temperature dependence of diffusion coefficients on one and the same sample. Volatile admixtures can be introduced into semiconductor materials by vapor annealing. The vapor pressure of the volatile substance has to be much lower than the equilibrium pressure; otherwise a new phase might occur at the surface of the semiconductor. In their experiments, the authors alloyed a germanium sample with antimony in a special device. The admixture was evaporated in the same device. The sample whose temperature was kept constant was annealed in another device. Annealing took 6-12 hr. The samples were periodically taken out of the furnace, and the concentration of residual admixtures was determined. The diffusion coefficients, the constant $D_0 = 2.4 \text{ cm}^2/\text{sec}$, and the activation energy $E = 47,000 \text{ cal/mole}$ were determined from Eq. (3), and the experimental curves. The following method is recommended for simultaneous determination of the equilibrium concentration at the semiconductor surface and of the diffusion coefficients at two different temperatures; The amount of admixture remaining in the sample after vacuum annealing can be expressed by

X.

Card 3/84

36038

S/032/61/027/011/005/016
B116/B102

Determination of the diffusion ...

$$\frac{q}{C_0 s} = \frac{8}{\pi^2} \sum_{k=0}^{\infty} \frac{(1 - \exp \left\{ -\pi^2 (2k+1)^2 \cdot \frac{D_1 t}{l^2} \right\}) \exp \left\{ -\pi^2 (2k+1)^2 \cdot \frac{D_2 \tau}{l^2} \right\}}{(2k+1)^2} \quad (5)$$

if $\frac{1}{D} \gg 1$. q is the amount of substance diffusing into a flat plate during the time t (if $\frac{1}{D} \gg 1$); C_0 is the concentration which is in equilibrium with the vapor pressure over the pure volatile component at the temperature of the low-temperature region; s is the surface area of the plate; D_1 and D_2 are the diffusion coefficients obtained by annealing in vapor and vacuo, respectively, at different temperatures; t and τ are the corresponding annealing times. Next, q is determined after annealing, and the experimental points are entered in the diagram (Fig.5). $C_0 l s$ and $1/D_2$ as well as l^2/D_1 are simultaneously obtained from the ordinate, the abscissa, and the z -curve parameter, respectively, with which the experimental points agree. C_0 , D_1 , and D_2 are obtained from these data. A paper of V. M. Kozlovskaya (R. N. Rubinshteyn, V. M. Kozlovskaya. Fizika tverdogo tela, 3, 11 (1961)) is mentioned.

Card 4/6 6